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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/525,059

**Applicant(s)**

KOBAYASHI ET AL.

**Examiner**

BARAK NISSAN

**Art Unit**

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This communication is in response to Applicant's reply filed under 37 CFR 1.111 on 12/5/2007. Claims 1 and 14-18 have been amended, and Claims 1-18 remain pending.

2. Amendment to the drawings in response to examiner's objection has been considered. The amendment to the drawings obviates previously raised objection, as such this rejection hereby withdrawn.

Amendment to the abstract in response to examiner's objection has been considered. The amendment to the abstract obviates previously raised objection, as such this rejection hereby withdrawn.

Amendment to the claims 15-18 in response to examiner's objection under 37 CFR 11.75(c) has been considered. The amendment to the claims obviates previously raised objection, as such this rejection hereby withdrawn.

Amendment to the claim 1 in response to rejection under 35 USC 112, second paragraph has been considered. The amendment to the claim obviates previously raised objection, as such this rejection hereby withdrawn.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art

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to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, and 4-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korus et al. (US 6,721,297) in view of Shinomiya (US 2003/0037165) in further view of Watanabe et al. (US 7,031,709).

5. Regarding claim 1, Korus teaches a system (100) of Figure 1 comprising:

a mobile router device (106) to which at least one terminal device (102) attaches (col 3, lines 10-26), the mobile router device connects a backbone network (e.g. one of the network sites, Figure 1) having a plurality of access routers (126, 136, 144), to a mobile network at a first location (e.g. wideband) via a first access router of the plurality of access routers, the mobile network moving within the backbone network (mobile router connects to a network to other network links, col 3, lines 23-32) by moving to a second location (e.g. mixed site) and connecting to a second access router of the plurality of access routers, the mobile router device (col 3, lines 10-45, i.e. first and second locations are being accessible by wireless access technologies that have the access routers);

the mobile router device comprising:

a means for recording a virtual address (e.g. IP address/subnet prefix) common to the mobile router device (col 4 lines 44-46) attaching to the mobile network at the first location and second location, (IP packets (data) that enables mobile routers to attach to networks, col 1, lines 15-25, i.e. first and second locations which are the routers deal with the IP packets being distributed between the hosts such as the mobile device in the mobile network) and

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producing a care of address with respect to the virtual address and usable by the mobile router device at the second location (abstract); and

a means (software routines) for generating (step 310) and transmitting (step 314-320) a binding update message which makes the virtual address corresponding to the care of address of the mobile router device (abstract, software routines on column 5, lines 46-52 and column 6, lines 5-35),

Korus further teaches that the mobile router device which can be modified as the backup router device and configured to transmit another binding update message (data) that includes the virtual address corresponding to the mobile router device and another care of address (i.e. alternatively they can either be multicast or unicast CoA interpreting as there is another care of address used for another corresponding node such as a backup router) corresponding to the backup router device (i.e. corresponding nodes, col 6 lines 24, Figure 3, col 6 lines 52-56).

However, Korus does not teach:

a means for determining whether or not the mobile router device works as a master router that can connect the mobile network to the backbone network; and

further fails to teach:

wherein the mobile network includes a backup router, and if the backup router determines the connection to the backbone network is lost between the mobile router device and the first access router;

Shinomiya, on the other hand, teaches determining whether or not a router device works as a master router (master router, Shinomiya, [0011]) that can connect the mobile network to the

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backbone network; (network is connected to other networks through a router, Shinomiya, [0005]);

It would have been obvious to one of ordinary skilled in the art at the time the invention was made having the teachings of Korus and Shinomiya before them, to modify Korus's teachings to modify the mobile router to work as master router but, also to include a backup router device that has a virtual or IP address which has the capability to continue the processing of the packet taught by Shinomiya. One would be motivated to combine these teachings because upon movement in the mobile network, the mobile router working as a backup router depends on attributes of the mobile device that can obtain care of address on behalf of the attached mobile network hosts and create a binding between the mobile and the virtual address.

The combination of Korus in view of Shinomiya does not teach <sup>a</sup> the backup router ~~that~~ <sup>AC</sup> determines the connection to the backbone network is lost between the mobile router device and the first access router;

Watanabe, on the other hand, teaches the backup router device (modified as a router device or home agent) determines the connection to the backbone network is lost between the mobile router device and the first access router (i.e. home agent determines if connection with a mobile device is lost, the home agent monitors the receipt of binding update messages from the access routers of the network, col 9 lines 1-11).

It would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the communications system of Korus in view of Shinomiya to have the mobile router to work as master router but, also to include a backup router device that will to continue the processing of the packet that has the virtual address or IP address after determining

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that the connection was lost between the mobile device and another access router taught by Watanabe. One would be motivated to combine these teachings because upon movement in the mobile network, the mobile router working as a backup router depends on characteristics of the mobile device that can obtain care of address on behalf of the attached mobile network hosts and produce a binding between the mobile and the virtual address. The binding update message is the data being transmitted within the mobile network between the routers and only if the mobile router is lost a backup router is automatically able to continue the communication processing which includes another care of address corresponding to that backup router which is known in the art.

8. Regarding claim 2, the combination of Korus in view of Shinomiya and further view of Watanabe teaches a mobile router device, comprising:

Korus teaches a system wherein:

the virtual address (IP addresses, col 1, lines 15-25 [Korus]) is used as a real address (IP addressable, col 1 lines 26-36 [Korus]) assigned to any one of the respective mobile router devices attaching to the mobile network (col 3, lines 10-15 [Korus]).

9. Regarding claim 4, the combination of Korus in view of Shinomiya and further view of Watanabe teaches a mobile router device, comprising:

Shinomiya teaches wherein:

a means for storing a sequence number (Shinomiya, 0022), into a master router advertisement packet and for transmitting the packet (Shinomiya, [0022]) when the mobile router

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device (Korus, mentioned in claim 1, col 3, lines 10-15) works as the master router (Shinomiya, [0011]).

Korus teaches the binding update message (i.e. the binding update message is just a packet(s) transmitted via network between routers, Korus mentioned in claim 1, col 1, lines 54-59).

10. Regarding claim 5, the combination of Korus in view of Shinomiya and further view of Watanabe teaches the mobile router device (col 3, lines 10-15 [Korus]), as described above.

Shinomiya, on the other hand, teaches:

the master router advertisement packet uses a virtual router advertisement in accordance with a virtual router redundancy protocol (Shinomiya, [0051]).

It would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the communications system of the combination of Korus in view of Shinomiya and further view of Watanabe to include the mobile router device to work as master router where it has a message packet taught in Shinomiya using the virtual router advertisement in accordance with a VRRP in Korus and Watanabe. One would be motivated to combine these teachings because VRRP (virtual router redundancy protocol) is used for changing priority from master router to another virtual router (i.e. backup router, 0051 [Shinomiya]) for continuing the processing if the advertisement packet fails to be transmitted via networks. VRRP is very well known in the art for associating whether or not routers fails in processing the execution of packets [binding update messages] and have the another router [e.g. mobile] to continue the prosecution upon the movement in the networks.



11. Regarding claim 6, the combination of Korus in view of Shinomiya and further view of Watanabe teaches a mobile router device, wherein:

Shinomiya teaches the master router advertisement packet (Shinomiya, [0051]).

Korus, on the other hand, teaches IPv6 router advertisement message (col 2, lines 25-30 [Korus]).

It would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the communications system of the combination of Korus in view of Shinomiya and further view of Watanabe to include IPv6(Internet protocol version 6) for the purposes of allocating of addresses that may make routing easier taught in Korus being used by the master router advertisement packet in Shinomiya and Watanabe teachings. One would be motivated to combine these teachings because IPv6 was made for a larger address space which helped routers transmit more packet messages in networks.

12. Regarding claim 7, the combination of Korus in view of Shinomiya and further view of Watanabe teaches a mobile router device, further comprising:

Shinomiya teaches:

a means [master/backup router] for receiving a master router advertisement packet which is transmitted by (Shinomiya, [0019]), notifies the mobile router device of the another mobile router device working as the master router (mentioned in claim 1); (uses the backup router to process the packets if the master router fails to transmit, Shinomiya, [0046]).

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a means for recording a sequence number (Shinomiya, 0022) of the binding update message (Korus mentioned in claim 1, col 1, lines 54-59) contained in the master router advertisement packet received in order to use the sequence number (Shinomiya, 0132) for a case when the mobile router device per se becomes the master router (mentioned in claim 1),

Shinomiya further teaches:

the sequence of information regarding the master router receiving packets of messages and if it fails the backup router will take over the process. [Shinomiya, 0022].

Korus, on the other hand, teaches that packets are transmitted by another mobile router device (col 3, lines 23-32 [Korus]).

13. Regarding claim 8, this claim comprises, the mobile router device of claim 7, wherein the master router advertisement packet uses a virtual router advertisement in accordance with a virtual router redundancy protocol is described in claim 5. Thus, claim 8 is rejected upon the limitations as taught in claim 8 which are similar to the limitations of claim 5 in scope and language, thereby same rationale of rejection is applicable.

14. Regarding claim 9, this claim comprises, the mobile router device of claim 7, wherein the master router advertisement packet uses IPv6 router advertisement message is described in claim 6. Thus, claim 9 is rejected upon the limitations as taught in claim 6 which are similar to the limitations of claim 9 in scope and language, thereby same rationale of rejection is applicable.

15. Regarding claim 10, a mobile network system of Korus in view of Shinomiya and further view of Watanabe comprised<sup>S</sup> (abstract, [Korus]):

(K)

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a plurality of the mobile router devices (Korus uses nodes as defined as router devices, col 14, lines 40-41 [Korus])

at least one terminal device attaching to the mobile router devices; (col 3, lines 10-15 [Korus])

a home agent device for managing movements of the mobile router devices (Korus, [col 4-5, lines 55-67, 1-6]). Korus teaches the use of home agent device for managing the mobile node (i.e. mobile router), col 4, lines 55-60 [Korus]). Watanabe emphasizes that home agent in addition manages as the mobile node accepting binding update messages and the home agent begins to associate the address of a mobile device with a new CoA (col 5 lines 43-46).

16. Regarding claim 11, Korus teaches a mobile network system, wherein:

at least one of the mobile router devices (col 3, lines 10-15) has a physical interface (interface, col 5, lines 17-23 [Korus]) to a backbone network, a type of which interface is a different from those of other mobile router devices. In such one embodiment, Korus describes (Fig 4.) the mobile router monitors and selects appropriate external network interfaces that is available to different mobile networks. (col 3-4, lines 63-67, 1-3 [Korus]).

17. Regarding claim 12, the combination of Korus in view of Shinomiya and further view of Watanabe teaches the mobile network system of claim 10, as described above in claim 1, wherein;

each one of the mobile router devices uses a virtual address (Korus, i.e. IP address, abstract) common to the others at a side to backbone network and implements a virtual router

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redundancy protocol (Shinomiya teaches VRRP which enables a router working as a master router if its qualified, [0050]) at a side to a mobile network, wherein:

when one of the mobile router devices works as a master router (mentioned in claim 1), the master router uses the common virtual address for communication (virtual router such as master router having a common address, Shinomiya, 0018).

18. Regarding claim 13, the combination of Korus in view of Shinomiya and further view of Watanabe teaches a system wherein:

one of the mobile router device working as the master router (mentioned in claim 1) uses the common virtual address (Shinomiya, 0018) and a care of address generated corresponding to the common virtual address for transmitting a binding update message (Korus, abstract).

Korus teaches transmitting a binding update message to be used for a mobility management to the home agent device. [col 4-5, lines 55-67, 1-6 [Korus]].

It would have been obvious to one skill in the art at the time the invention was made to modify the communications system of the combination of Korus in view of Shinomiya and further view of Watanabe to include the mobility management to the home agent device taught in Korus and Watanabe for transmitting messages of the master router taught in Shinomiya in Korus teachings. One would be motivated to combine these teachings because the home agent is also a correspondent node that performs mobility management functions. As Watanabe explains, the home agent can accept binding updated messages from the access router and manage those packets by updating the table which associates the home address of the mobile

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device with the new care of address (CoA) based on the binding updated message (col 6 line 66- col 7 line 5).

6. Regarding claim 14, the combination of Korus in view of Shinomiya and further view of Watanabe teaches a mobile network system, comprising:

at least one terminal device (Korus, col 3, lines 23-26);

a mobile network including a plurality of mobile router devices, (Korus col 14, lines 40-41) to which the terminal device attaches, for coupling the mobile network to a backbone network, the plurality of mobile router devices (Figure 1) including a master router device and a backup router device (referring back to claim 1 where the limitations are substantially similar, rationale of rejection is applicable); and

a home agent device for associating a home address with a care of address and managing both of the addresses (Korus discusses home agent device with respect to an address, (col 4-5, lines 55-67, 1-6), abstract).

Korus further teaches in view of Shinomiya wherein:

the mobile network moves from being connected to a home network at a first location within the backbone network to a second location within the backbone network (Korus, col 5, 60-65, i.e. backbone network can be referred to foreign network, the mobile router determines where its location will be moved with the required care of address),

when the master router device at the first location (modified with the teachings of Shinomiya that a mobile router can be a master router located in the first mobile network 1, Figure 1[Korus]) continues to work as the master router after the mobile network moves to the

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second location (Korus, in order for the router to continue communication of its movement to the next location, mobile-IPv6 provides for the mobile router or node to receive a care of address when it moves to the new link, Col 4 lines 50-52) the management method associates a care of address corresponding to a virtual address (Korus, IP address, abstract) generated after the movement to the second location with the virtual address and registers the care of address with the home agent device (Korus, col 4-5, lines 55-67, 1-6), and [Modified with the combine of the two references that when a mobile router device works as a backup router after the movement (mentioned in claim 7), the care of address has to correspond to the virtual address in order for the routers to move to different locations within the networks (Korus, see abstract, Fig. 5 i.e. steps performed by mobile routers in obtaining a multicast care of address, Fig. 5)]

Watanabe further teaches:

if the backup router device determines the connection to the backbone network is lost between the master router device and the backbone network (Watanabe, i.e. home agent determines if connection with a mobile device is lost, the home agent monitors the receipt of binding update messages from the access routers of the network, col 9 lines 1-11), the backup router device transmits a binding update message that includes the virtual address corresponding to the master router device and another care of address corresponding to the backup router device (Korus, i.e. alternatively they can either be multicast or unicast CoA interpreting as there is another care of address used for another corresponding node such as a backup router, i.e. corresponding nodes, col 6 lines 24, Figure 3, col 6 lines 52-56).

The combination of Korus in view of Shinomiya and further view of Watanabe teaches that a backup router taught in Shinomiya could be modified as a mobile router or any access

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router that will send binding messages updates (e.g. packets) within a mobile network with the required care of address taught in Korus with the further teachings by Watanabe which mentioned that the home agent determined if there was lost connection within the network between the mobile device and the access routers when transmitting the binding updated messages corresponding to the care of addresses.

19. Regarding claim 15, Korus further teaches wherein:

the virtual address is any one of physical addresses to be used in physical interfaces, to the backbone network, (Korus, (Fig 4.) network interfaces that's available to different mobile networks, col 3-4, lines 63-67, 1-3) when each one of the mobile router devices attaching to the mobile network is connected to the home network (col 8, lines 36-40).

Korus explains that the packets are sent to the home address where are routed through the network to the mobile router's home network (i.e. mobile network attached to home network). One ordinary skilled in the art would know that the virtual addresses are used within the interface to store packet information within any network.

20. Regarding claim 16, the combination of Korus in view of Shinomiya and further view of Watanabe teaches a mobile device, wherein:

the virtual address and a sequence number (Shinomiya, 0022) of a binding update message (Korus, abstract) to be transmitted to the home agent device (Korus, col 4, lines 55-60) is included in a master router advertisement packet to be transmitted (Shinomiya, [0022] to the mobile network for notifying the home agent device of the mobile router device being to work as

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the master router (as mentioned in the above claims, [master router, Shinomiya, 0011]). This claim comprises similar steps discussed in the above claims in scope and language, thereby same rationale of rejection is applicable.

21. Regarding claim 17, Korus further teaches:

the master router advertisement packet is a virtual router advertisement packet to be used by a virtual router redundancy protocol implemented in the mobile router device at a side to the mobile network (Korus, col 3, lines 10-15) [(limitations are similar to the combination of claims 5 and 8 in scope and language, thereby rationale rejection is applicable)].

22. Regarding claim 18, the combination of Korus in view of Shinomiya and further view of Watanabe teaches a mobile device, wherein:

the master router advertisement packet (Shinomiya, 0051) includes IPv6 (Korus, col 2, lines 25-30) router advertisement message to be transmitted from the mobile router device working as the master router (mentioned in the above claims) to a side of the mobile network of the mobile router device (Korus, col 3, lines 10-15). Thus, claim 18 is rejected upon the limitations as taught in claims 6, 9, and 17 which are similar to the limitations of claim 18 in scope and language, thereby same rationale of rejection is applicable.

23. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Korus et al. (US 6721297) in view of Shinomiya (US 2003/0037165) in further view of Simpson (US 7234001).



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24. Regarding claim 3, the combination of Korus in view of Shinomiya taught the mobile router device according to claim 1, wherein:

a means for determining whether or not the mobile router device (Korus, col 3, lines 10-15) per se works as the master router (Shinomiya, [0011]), however Shinomiya also teaches the master router works in response to the priority [Shinomiya, 0070].

Shinomiya teaches:

a means for changing a priority which determines the master router and a backup router (Shinomiya, [0070]), however does not teach in response to the quality of the link; (Simpson, col 3, lines 54-66).

The combination of Korus in view of Shinomiya does not teach a means for monitoring quality of a link connected to the backbone network;

Simpson teaches monitoring quality of a link connected to the backbone network (Simpson, col 3, lines 54-66). Simpson, on the other hand, discloses internal router automatically maintains a backup link in a dormant state until a network failure affects some communication with the primary router (interpreted as master router mentioned in Shinomiya teachings).

Simpson, in the same field of applicant's endeavor, teaches the monitoring of the link to some network and it would be obvious to one ordinary skilled in the art that, utilizing Simpson teachings with Shinomiya's system because "when switching over to the master router, a backup router having the highest priority of the whole backup routers is selected." [Shinomiya, 0070].

It would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify a system of Korus in view of Shinomiya to include the mobile router to work as master router for highest priority taught in Shinomiya with monitoring the quality of a

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link to the network in Simpson's teachings in Korus. One would be motivated to combine the teachings of Korus and Shinomiya with Simpson's teachings because in response to the highest priority of a router such a master router can process much better to a link that was monitored for best quality for connecting networks.

### ***Response to Arguments***

25. Regarding claim 1, applicant argues that the applied reference of Korus does not teach claim limitation, as recited, namely, the mobile network includes a backup router, and if the backup router determines the connection to the backbone network is lost between the mobile router device and the first access router, the backup router device transmits another binding update message that includes the virtual address corresponding to the mobile router device and another care of address corresponding to the backup router device.

In response to the above mentioned argument, Korus does not disclose a mobile network that includes a backup router device that determines the connection to the backbone network is lost. However, the teachings of Watanabe did actually mention that the home agent which can be modified as a router device that holds some type of address determines the connection is lost between the mobile device and the access routers such as a back up router of the transmission of binding update messages being sent across the network (Watanabe, col 9 lines 1-11). The backup router which is assumed to have an address will continue the processing of the transmission of another binding update message or data packets only if the mobile router device fails within the network which is mentioned explicitly in Shinomiya reference (see paragraph 0018 and 0019). The reference of Watanabe is moot in light of the new grounds of rejection with the combining

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references of Korus and Shinomiya which explicitly addresses the limitations regarding the claim.

26. The applicant also argues in substance that Korus does not disclose including “transmit another binding message update that includes the mobile node’s home address and another care of address of the backup router” and “the virtual address corresponding to the mobile router device corresponding to the backup router device.”

In response to the above mentioned arguments, Korus does mention that the data packets or binding update message being transmitted by the router includes a home address (Korus, Fig. 6 step 612). Again, Korus does not mention about a backup router which includes a care of address but, it can be modified as a mobile node or device which does exactly the same process in sending the updated messages in the movement within the network sites (Korus, Fig 7C or Fig. 7F, i.e. sending binding update messages to corresponding nodes such as backup router that includes an care of address or IP addresses). The examiner does not disagree with the applicant that Korus does not teach the virtual address corresponding to the backup router device. However, Korus as modified by Shinomiya teaches the virtual address corresponding to the mobile router device corresponding to the backup router device. Specifically, Korus teaches the virtual address corresponding to the mobile router device, but not to a backup router device (Korus, col 5 lines 16-65).

Shinomiya teaches a network that has an address corresponding to a backup router device (se paragraph 0074, 0127). Therefore, Korus as modified by Shinomiya teaches the claimed mobile router device.

27. Regarding claim 1, applicant argues the Shinomoya does not teach claim limitation as

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recited, namely, the backup router device transmits another binding update message that includes the virtual address corresponding to the mobile router device and another care of address corresponding to the backup router device. In response to the arguments, the applicant is correct in the remark that Shinomiya does not disclose any type of mobile router in a mobile network of any kind nor disclosing any care of addresses corresponding to the router device or any binding messages being transmitted that include address. However, that is why reference to Korus is made to teach those limitations because Korus clearly mentions all about the mobile devices in the mobile network with the use of care of addresses correspond to the access routers when transmitting data packets or binding messages within the network. Again, Korus does mention the fact that mobile router device can alternatively use a different care of address which is assumed that there is more than one care of address. Thus, the combined teachings showed that backup router teachings in Shinomiya could be modified as a mobile router or any access router that will send binding messages updates or data packets within a mobile network with the required care of address taught in Korus. It appears that applicant is arguing the references individually.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

28. Applicants arguments filed on 12/5/2007 have been fully considered, but are not found to be persuasive.

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29. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARAK NISSAN whose telephone number is (571)270-3632. The examiner can normally be reached on Mon-Thurs 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571)-272-3836. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Barak Nissan  
Patent Examiner

  
ANDREW CALDWELL  
SUPERVISORY PATENT EXAMINER